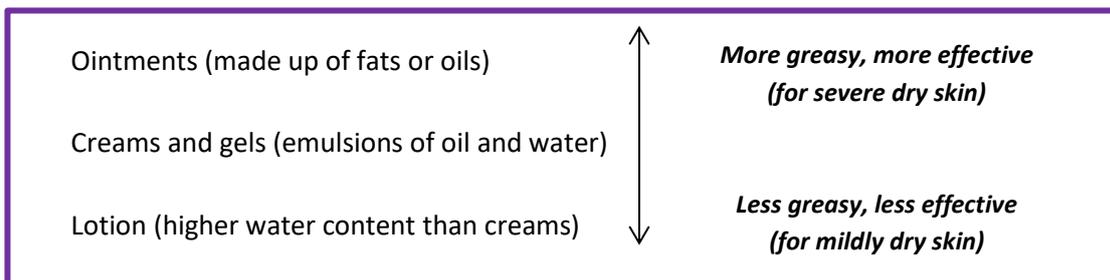


## EMOLLIENT FORMULARY AND PRESCRIBING GUIDELINES

### What are emollients<sup>1</sup>

Emollients soothe, smooth and hydrate the skin and are indicated for all dry or scaling disorders. Their effects are short lived and they should be applied frequently even after improvement occurs. They are useful in dry and eczematous disorders. The choice of an appropriate emollient will depend on the severity of the condition, patient preference, and the site of application.

### Types of emollients<sup>1+2</sup>



#### *Ointments*

These are greasy preparations usually made up of fats or oils that are particularly suitable for chronic, dry, lesions. They contain less water than other emollients and thus have fewer preservatives (they are particularly useful for people who react to preservatives). Ointments should not be used on weeping eczema and they may exacerbate acne and folliculitis.

#### *Creams and gels*

Creams are emulsions of oil and water and are usually well absorbed into the skin. Generally, creams are cosmetically more acceptable than ointments because they are less greasy and easier to apply. They do contain preservatives and so can cause sensitivity in some patients. Gels generally have a high water content and are non-greasy. They are particularly suitable for application to the face and scalp.

#### *Lotions*

Lotions contain more water and less fat than cream and have a cooling effect. They may be preferred to ointments or creams for application over hairy areas. They are useful for quick absorption if time is short. Lotions in alcoholic basis can sting if used on broken skin.

### Emollients containing urea or antimicrobials<sup>1</sup> or menthol

#### *Urea*

Urea is a keratin softener and hydrating agent used in the treatment of dry, scaling conditions (including ichthyosis). Urea can cause stinging and irritation in some people. It is occasionally used with other topical agents such as corticosteroids to enhance penetration of the skin.

## *Antimicrobials*

Preparations containing an antibacterial should be avoided unless infection is present or is a frequent complication.

## *Menthol*

Menthol in aqueous cream may be used for the management of itching not related to a medical skin condition. Menthol in aqueous cream is available as 0.5%, 1%, 2% and 5% and are available for self-purchase over the counter. If there is significant itching that requires prescribing Menthoderms is the preferred product of choice.

## **Soap substitutes, shower emollients and bath additives<sup>3</sup>**

Evidence around the use of bath and shower emollients is limited. However, normal soaps can dry out and irritate the skin and are best avoided in people with dry skin conditions. Most emollients can be used as a soap substitute and therefore shower emollients are not recommended. Any ointment (except 50:50) can be dissolved in some hot water and added to the bath water as a bath additive. Bath additives and shower gels are *not* recommended for prescribing except for children with atopic eczema.

It is important to counsel patients to continue to use their usual leave on emollient(s) in addition to any bath or shower product. Care must be taken when using emollients in the bath as they may make surfaces slippery.

## **How and when to apply emollients<sup>1+4</sup>**

- Applied as often as possible (three to four times a day but can be more frequently)
- By dabbing on the skin, then stroking in a downward motion in the direction of hair growth
- Without vigorous rubbing, which may cause plugging of hair follicles, then infection (folliculitis)
- Always after a bath or shower
- Continue to use emollient even after the condition is controlled as emollients will help to prevent future exacerbations
- Should be applied 20-30 minutes before topical steroids
- Emollient preparations contained in tubs should be removed with a clean spoon or spatula to reduce bacterial contamination of the emollient

## **Patient factors**

### *Paraffin based emollients<sup>1</sup>*

Patients using a paraffin based emollient that is covered by dressings or clothing should be counselled that smoking or using a naked open flame can cause dressings or clothing to catch fire (as per the Drug Safety Update in April 2016). Patients should be advised not to smoke, use naked flames or go near anything that may cause a fire whilst emollients are in contact with dressings or clothing. Clothing and bedding should be changed regularly as emollients can soak into the fabric and become a fire hazard.

### *Sensitivities to excipients<sup>1</sup>*

Excipients in topical products rarely cause sensitivities. However, some excipients may rarely cause sensitisation and this should be suspected if an eczematous reaction occurs. If a patch test indicates allergy to an excipient, products containing the substance should be avoided. As per the BNF the following excipients in topical preparations are associated, rarely, with sensitisation:

- Beeswax
- Benzyl alcohol
- Butylated hydroxyanisole
- Butylated hydroxytoluene
- Cetostearyl alcohol (including cetyl and stearyl alcohol)
- Chlorocresol
- Edetic acid (EDTA)
- Ethylenediamine
- Fragrances
- Hydroxybenzoates (parabens)
- Imidurea
- Isopropyl palmitate
- *N*-(3-Chloroallyl) hexaminium chloride (quaternium 15)
- Polysorbates
- Propylene glycol
- Sodium metabisulfite
- Sorbic acid
- Wool fat and related substances including lanolin (purified versions of wool fat have reduced the problem)

In addition to this MIMS recognises the following as skin sensitisers in emollients<sup>4</sup>:

- Triethanolamine
- Benzalkonium chloride
- Phenethyl alcohol
- Phenoxyethanol
- Quaternium-15
- Triclosan
- Cetrimonium bromide
- Disodium edetate

These 'known sensitisers' are included in the tables below, however, for the full list of excipients for a particular product please refer to the Summary of Product Characteristics where one is available.

In March 2013, the MHRA issued a Drug Safety Update on the use of aqueous cream. A review found that aqueous cream can cause skin reactions and irritation when used as a moisturiser as it contains sodium lauryl sulphate; particularly in children with eczema. Due to this, aqueous cream is no longer recommended as a leave on emollient.

### *Choosing the right emollient<sup>3</sup>*

The type of emollient needed is dependent on the dryness of the skin, the area of the skin affected and patient preference. Initially, it is best to trial a small quantity to establish suitability.

## Prescribing and quantities<sup>4</sup>

The prescribing of emollients should be reserved for patients with a **clear clinical indication** and not for cosmetic purposes. Those patients with dry skin and no diagnosed skin condition should purchase their own products over the counter.

Newly diagnosed patients: Offer the formulary emollient with the lowest acquisition cost from the emollient ladder depending on severity of the condition.

Existing patients prescribed a non-formulary emollient for a diagnosed skin condition: Review with a view to trialling a preferred formulary emollient. Discuss with the patient to agree the change.

Existing patients prescribed an emollient for dry skin with no diagnosed skin condition: Review these patients with a view to stopping prescribing and recommending an over the counter product for self-purchase.

Review emollients at least annually and stop where continued use is not justified e.g. skin condition has improved and there is no evidence of chronic relapsing eczema

Quantities to prescribe:

- Prescribe small quantities initially until an acceptable product is found.
- See below for appropriate quantities for a week and a month:

Body site	Creams or ointments		Lotions	
	7 days	One month	7 days	One month
Face	15-30g	60-120g	100ml	400ml
Both hands	25-50g	100-200g	200ml	800ml
Scalp	50-100g	200g-400g	200ml	800ml
Both arms or legs	100-200g	400-800g	200ml	800ml
Trunk	400g	1600g	500ml	2000ml
Groins and genitalia	15-25g	60-100g	100ml	400ml

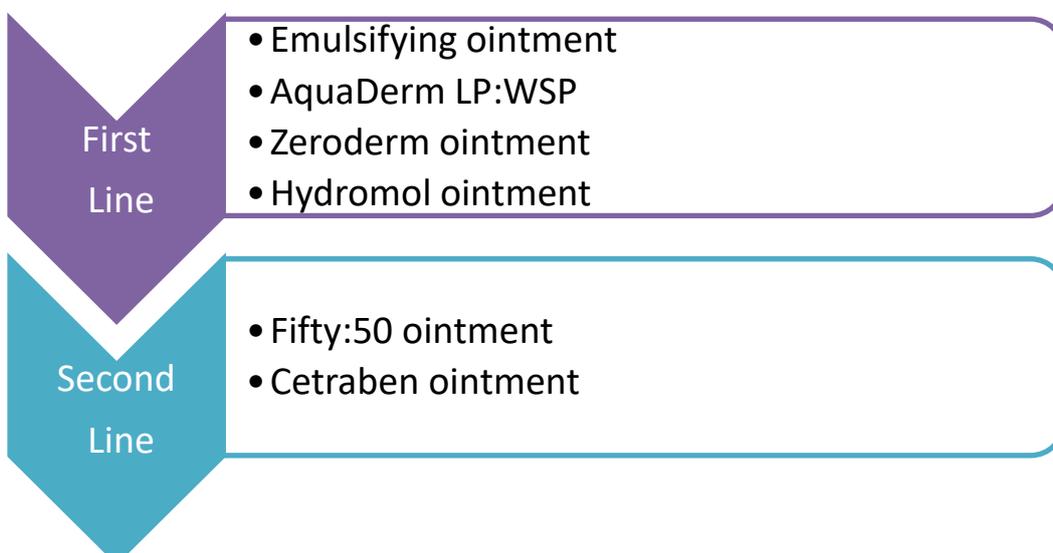
As a general guide an average adult requires 25g – 30g to cover the whole body once / 600g per week and a child requires 250 – 500g per week.

## Cost effective prescribing

### Emollient ointments<sup>1</sup>

Table 1: Emollient ointments, paraffin content, known sensitisers, pack size(s) and cost

Brands	Paraffin Content	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
<b>Cetraben Ointment (FORMULARY CHOICE)</b>	Light liquid paraffin 45%, white soft paraffin 30%	Cetostearyl alcohol	125g = £3.49 450g = £5.39
Epaderm ointment	Liquid paraffin 40%, yellow soft paraffin 30%, emulsifying wax 30%	Cetostearyl alcohol	125g = £3.69 500g = £6.26 1000g = £11.53
<b>Hydromol ointment (FORMULARY CHOICE)</b>		Cetostearyl alcohol	125g = £2.90 500g = £4.92 1000g = £9.15
<b>Zeroderm ointment (FORMULARY CHOICE)</b>	Liquid paraffin 40%, white soft paraffin 30%	Cetostearyl alcohol, polysorbate 60	125g = £2.41 500g = £4.10
WSP:LP (50:50) ointment	Liquid paraffin 50%, white soft paraffin 50%	No known sensitisers	500g = £4.57
<b>Fifty:50 ointment (FORMULARY CHOICE)</b>		No known sensitisers	250g = £1.83 500g = £3.66
<b>AquaDerm LP 50% in WSP ointment (FORMULARY CHOICE)</b>		No known sensitisers	250g = £1.75 500g = £3.49
Diprobase ointment	Liquid paraffin 5%, white soft paraffin 95%	No known sensitisers	50g = £1.28 500g = £5.99
<b>Emulsifying ointment (FORMULARY CHOICE)</b>	Emulsifying wax 30%, liquid paraffin 20%, White soft paraffin 50%	Cetostearyl alcohol	500g = £2.96
QV intensive ointment	Light liquid paraffin 50.5%, white soft paraffin 20%	Cetostearyl alcohol	450g = £5.71



## Emollient creams and gels<sup>1</sup>

Table 2: Emollient creams, paraffin content, known sensitisers, pack size(s) and cost

Brands	Paraffin Content	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
Epaderm cream	Yellow soft paraffin 15%, liquid paraffin 10%, emulsifying wax 5%	Cetostearyl alcohol, chlorocresol	50g = £1.70 500g = £6.95
Unguentum M cream	Contains saturated neutral oil, liquid paraffin, white soft paraffin	Cetostearyl alcohol, polysorbate 40, propylene glycol, sorbic acid	50g = £1.41 100g = £2.78 200ml = £5.50 500g = £8.48
<b>Aquamax cream (FORMULARY CHOICE)</b>	Light liquid paraffin 8%, white soft paraffin 20%	Cetostearyl alcohol, polysorbate 60, phenoxyethanol	100g = £1.89 500g = £3.99
Aquamol emollient cream	Liquid paraffin 4.8%, white soft paraffin 12%	Cetostearyl alcohol, chlorocresol	50g = £1.22 500g = £6.40
AproDerm emollient cream	Liquid paraffin 6%, white soft paraffin 15%	Cetostearyl alcohol	500g = £5.27
Diprobase cream		Cetostearyl alcohol, chlorocresol	50g = £1.28 500g = £6.32
Oilatum cream		Benzyl alcohol, cetostearyl alcohol, sorbic acid/sorbates, propylene glycol	50g = £1.67 150g = £3.06 500ml = £5.28 1050ml = £9.98
Oilatum Junior cream		Benzyl alcohol, cetostearyl alcohol, sorbic acid/sorbates	150g = £3.06 350ml = £4.65 500ml = £5.28
<b>Epimax cream (FORMULARY CHOICE)</b>		Cetosteryl alcohol, phenoxyethanol	100g = £0.75 500g = £2.49
<b>ZeroAQS cream (FORMULARY CHOICE)</b>		Cetostearyl alcohol, chlorocresol	500g = £3.29
Zerobase cream	Liquid paraffin 11%, white soft paraffin 10%	Cetostearyl alcohol, chlorocresol	50g = £1.04 500g = £5.26
Hydromol cream	Liquid paraffin 13.8%, sodium pidolate 2.5%	Cetostearyl alcohol, hydroxybenzoates (parabens), phenoxyethanol	50g = £2.19 100g = £4.09 500g = £11.92
Cetraben cream	White soft paraffin 13.2%, light Liquid paraffin 10.5%	Cetostearyl alcohol, hydroxybenzoates (parabens), phenoxyethanol	50g =£1.40 150g = £3.98 500g = £5.99 1050g = £11.62
Enopen cream		Cetostearyl alcohol, phenoxyethanol	50g =£1.40 150g = £3.98 500g = £5.99 1050g = £11.62

QV cream	Light liquid paraffin 10%, white soft paraffin 5%, glycerol 10%	Cetostearyl alcohol, hydroxybenzoates (parabens)	100g = £2.06 500g = £5.92 1050g = £12.05
<b>ZeroCream (FORMULARY CHOICE)</b> <small>N.B. BTUH PHARMACY STOCK E45 CREAM, CAN BE SWITCHED TO ZEROCREAM IN PRIMARY CARE</small>	Liquid paraffin 12.6%, white soft paraffin 14.5%, anhydrous lanolin 1%	Cetostearyl alcohol, hydroxybenzoates (parabens), lanolin/derivatives, phenoxyethanol	50g = £1.17 500g = £4.05
E45 cream	<i>(contain lanolin therefore avoid first line)</i>	Cetostearyl alcohol, hydroxybenzoates (parabens), lanolin/derivatives	50g = £1.61 125g = £2.91 350g = £5.50 500g = £5.99
ExoCream		Acrglyceryl monostearate, citric acid monohydrate, cetostearyl alcohol, sodium hydroxide, sodium cetostearyl sulphate, carbomer, hydroxybenzoates (parabens)	50g = £1.05 125g = £2.33 350g = £4.17 500g = £3.99
Aveeno cream (ACBS)		Avena sativa kernel flour	Isopropyl palmitate, cetostearyl alcohol, benzyl alcohol
Aproderm Colloidal Oat cream	<i>(oatmeal sensitivity cannot be excluded therefore avoid first line)</i>	Cetostearyl alcohol, disodium edetate	500g = £5.27
<b>Zeroveen cream (FORMULARY CHOICE)</b>		Isopropyl palmitate, cetostearyl alcohol, benzyl alcohol	100g = £2.74 500g = £5.89
Doublebase gel	Isopropyl myristate 15%, liquid paraffin 15%	Phenoxyethanol, triethanolamine	100g = £2.65 500g = £5.83
Doublebase dayleve gel		Phenoxyethanol, triethanolamine	100g = £2.65 500g = £6.29
AproDerm gel		Phenoxyethanol, polysorbate 20	100g = £1.99 500g = £3.99
HypoBase gel		Phenoxyethanol, triethanolamine	500g = £5.83
Myribase gel		Phenoxyethanol, triethanolamine	100g = £2.12 500g = £4.66
<b>Zerodouble gel (FORMULARY CHOICE)</b>		Phenoxyethanol, triethanolamine	100g = £2.25 475g = £4.71 500g = £4.90
<b>Isomol gel (FORMULARY CHOICE)</b>		Phenoxyethanol, triethanolamine, polysorbate 20	100g = £1.99 500g = £2.92

First  
Line

- Epimax cream
- ZeroAQS cream
- Aquamax cream
- Isomol gel

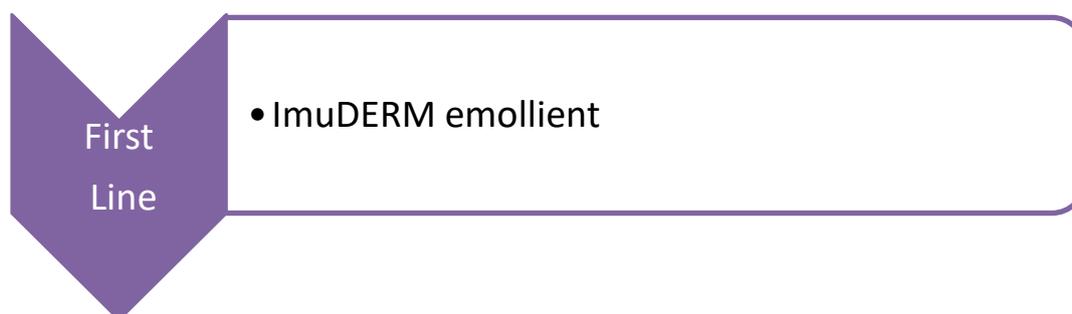
Second  
Line

- AproDerm gel
- ZeroCream
- Zeroveen cream

## Emollients containing urea<sup>1+4</sup>

Table 4: Emollients containing urea, ingredients, known sensitisers, pack size(s) and cost

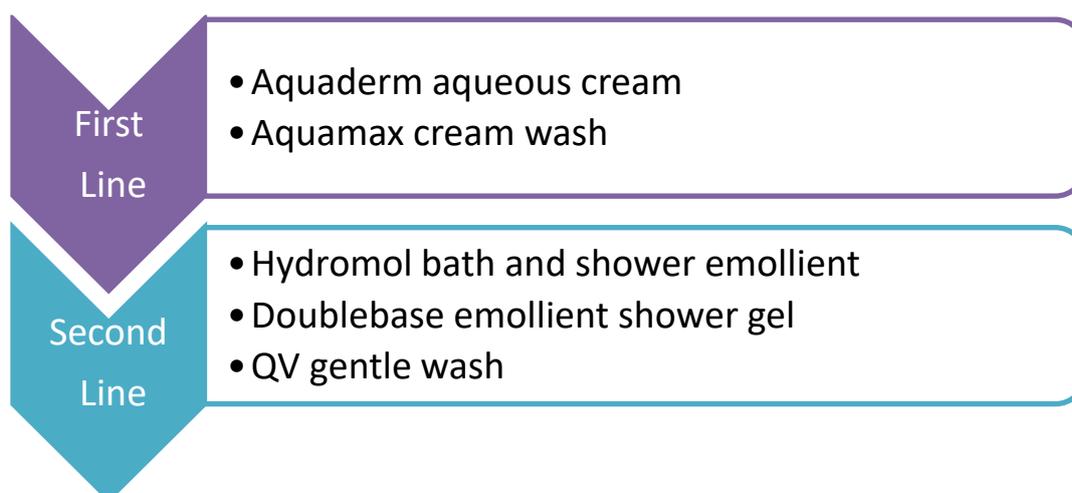
Brands	Ingredients	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
Aquadrate cream	Urea 10%	No known sensitisers	100g = £4.37
Hydromol Intensive cream		No known sensitisers	30g = £1.64 100g = £4.37
Calmurid cream	Urea 10%, lactic acid 5%	No known sensitisers	100g = £5.75 500g = £33.40
Balneum cream	Urea 5%, ceramide 0.1%	Cetostearyl alcohol, polysorbates, propylene glycol	50g = £2.85 £500g = £9.97
Balneum Plus cream	Urea 5%, lauromacrogols 3%	Benzyl alcohol, polysorbates	100g = £3.29 500g = £14.99
<b>ImuDERM emollient (FORMULARY CHOICE)</b>	Urea 5%, glycerine 5%	Benzyl alcohol, cetostearyl alcohol, phenoxyethanol, cetrimonium bromide	500g = £6.50
Dermatonics Once Heel Balm	Urea 25%	Beewax, lanolin/derivatives, phenoxyethanol	75ml = £3.60 200ml = £8.50



## Emollient shower products<sup>1</sup>

Table 5: Emollient shower products, ingredients, known sensitisers, pack size(s) and cost

Brands	Ingredients	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
Aqueous cream  (only as a soap substitute and not a leave on emollient)	Liquid paraffin 6%, white soft paraffin 15%, emulsifying wax 9%	Cetostearyl alcohol, sodium lauryl sulphate, phenoxyethanol	100g = £0.88 500g = £4.40
<b>AquaDerm aqueous cream (FORMULARY CHOICE)</b>  (only as a soap substitute and not a leave on emollient)  <small>N.B. BTUH PHARMACY STOCK GENERIC AQUEOUS CREAM, CAN BE SWITCHED TO AQUADERM AQUEOUS CREAM IN PRIMARY CARE</small>		Cetostearyl alcohol, sodium lauryl sulphate, phenoxyethanol	100g = £0.79 500g = £3.99
<b>Aquamax cream wash (FORMULARY CHOICE)</b>	Liquid paraffin 8%, white soft paraffin 20%	Cetostearyl alcohol, polysorbate 60, phenoxyethanol	250g = £2.99
<b>Doublebase emollient shower gel (FORMULARY CHOICE)</b>	Isopropyl myristate 15%, liquid paraffin 15%	No known sensitisers	200g = £5.21
E45 emollient wash cream (ACBS)	Zinc oxide 5% in an emollient	No known sensitisers	250ml = £3.30
Oilatum shower emollient gel fragrance free		No known sensitisers	150g = £5.27
<b>QV gentle wash (FORMULARY CHOICE)</b>	Glycerol 15%	Hydroxybenzoates (parabens)	250ml = £3.17 500ml = £5.29



## Emollient bath products<sup>1</sup>

Table 6: Emollient bath products, ingredients, known sensitisers, pack sizes(s) and cost

Brands	Ingredients	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
Aveeno bath oil (ACBS)	Colloidal oatmeal, white oat fraction in emollient basis  <i>(oatmeal sensitivity cannot be excluded therefore avoid first line)</i>	Beeswax, fragrance	250ml = £4.49
Cetraben emollient bath additive <b>(FORMULARY CHOICE)</b>	Light liquid paraffin 82.8%	No known sensitisers	500ml = £5.75
Dermlo bath emollient	Liquid paraffin 65%, acetylated wool alcohols 5%  <i>(contains lanolin therefore avoid first line)</i>	Lanolin/derivatives	500ml = £3.44
Doublebase emollient bath additive <b>(FORMULARY CHOICE)</b>	Liquid paraffin 65%	Cetostearyl alcohol, phenoxyethanol	500ml = £5.45
E45 emollient bath oil (ACBS)	Liquid paraffin 91%, cetyl dimeticone 5%	No known sensitisers	250ml = £3.30 500ml = £5.29
Hydromol bath and shower emollient <b>(FORMULARY CHOICE)</b>	Isopropyl myristate 13%, light liquid paraffin 37.8%	No known sensitisers	350ml = £3.88 500ml = £4.42
LPL 63.4 emollient bath additive	Light liquid paraffin 64.4%	Lanolin/derivatives, isopropyl palmitate	500ml = £3.10
Oilatum emollient bath additive		Lanolin/derivatives, isopropyl palmitate, fragrance	150ml = £2.95 250ml = £4.44 300ml = £5.02
Oilatum Junior bath additive (fragrance free)		Lanolin/derivatives, isopropyl palmitate	150ml = £2.95 250ml = £4.44 300ml = £5.02
QV bath oil	Light liquid paraffin 85.13%	Hydroxybenzoates (parabens)	250ml = £2.91 500ml = £4.76
Zerolatum emollient medicinal bath oil	Liquid paraffin 65%, acetylated wool alcohols 5%  <i>(contains lanolin therefore avoid first line)</i>	Lanolin/derivatives	500ml = £4.79

First  
Line

- Hydromol bath and shower emollient

Second  
Line

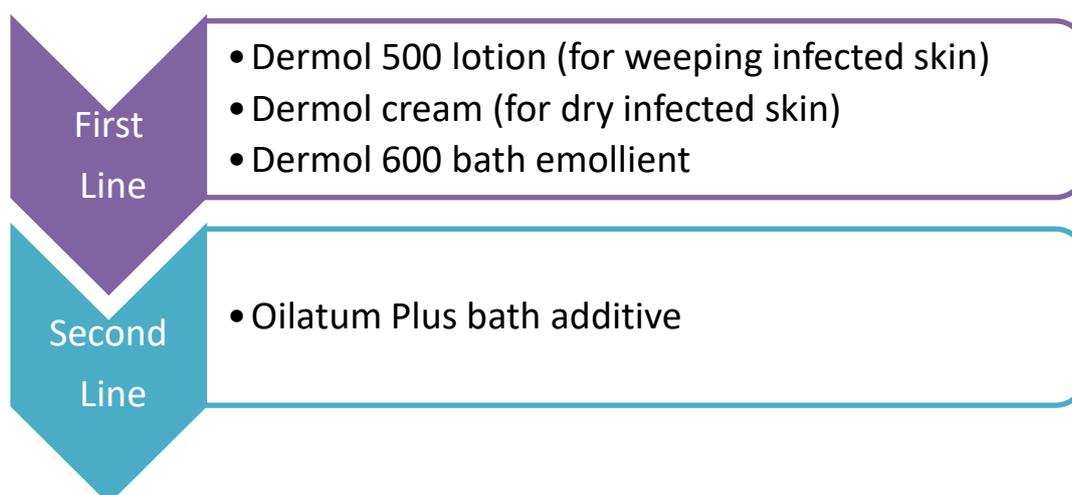
- Doublebase emollient bath additive
- Cetraben emollient bath additive

## Emollient products containing antimicrobials<sup>1</sup>

Table 7: Emollients containing antimicrobials, ingredients, known sensitisers, pack size(s) and cost

Brands	Ingredients	Known Sensitisers	Pack size(s) and Cost (as per MIMS June 2017)
<b>Emollient creams and lotions</b>			
Dermol 500 lotion (can be used as a soap substitute) <b>(FORMULARY CHOICE)</b>	Isopropyl myristate 2.5%, liquid paraffin 2.5%, benzalkonium chloride 0.1%, chlorhexidine hydrochloride 0.1%	Cetostearyl alcohol, phenoxyethanol, benzalkonium chloride, chlorhexidine	500ml = £6.04
Dermol cream (can be used as a soap substitute) <b>(FORMULARY CHOICE)</b>	Isopropyl myristate 10%, liquid paraffin 10%, benzalkonium chloride 0.1%, chlorhexidine hydrochloride 0.1%	Cetostearyl alcohol, phenoxyethanol, benzalkonium chloride, chlorhexidine	100g = £2.86 500g = £6.63
Eczmol cream (can be used as a soap substitute)	Chlorhexidine gluconate 1 % in emollient basis	Cetostearyl alcohol, chlorhexidine	250ml = £3.70
<b>Emollient bath products</b>			
Dermol 600 bath emollient <b>(FORMULARY CHOICE)</b>	Isopropyl myristate 25%, liquid paraffin 25%, benzalkonium chloride 0.5%	Polysorbate 60, benzalkonium chloride	600ml = £7.55
Emulsiderm liquid emulsion	25%, benzalkonium chloride 0.5%	Polysorbate 60, benzalkonium chloride	300ml = £3.85 1000ml = £12.00
Oilatum Plus bath additive <b>(FORMULARY CHOICE)</b>	Light liquid paraffin 52.5%, benzalkonium chloride 6%, triclosan 2%	Lanolin/derivatives, isopropyl palmitate, benzalkonium chloride, triclosan	500ml = £7.22

Only for use in active infection or if infection is a frequent complication



<b>Title</b>	Emollient formulary and prescribing guidelines
<b>Reference</b>	<ol style="list-style-type: none"> <li>1. BNF. Accessed via: <a href="https://www.medicinescomplete.com/mc/bnf/current/">https://www.medicinescomplete.com/mc/bnf/current/</a></li> <li>2. National eczema society. Accessed via: <a href="http://www.eczema.org/">http://www.eczema.org/</a></li> <li>3. PrescQIPP bulletin (May 2015)</li> <li>4. MIMS. Accessed via: <a href="http://www.mims.co.uk/">http://www.mims.co.uk/</a></li> </ol>
<b>Approved by</b>	<p>Basildon and Brentwood CCG Prescribing Subgroup  Thurrock CCG Medicines Safety Group  Medicines Management Committee</p>
<b>Date approved</b>	July 2017
<b>Review date</b>	July 2019